

# Pre-Harvest Desiccation in Straight Cut Canola Protocol

*As straight-cut canola acres increase to reduce costs and improve harvest efficiency, growers face challenges such as uneven crop maturity, green stems, late-season weed pressure, and variable environmental conditions that can delay harvest and impact grade. Pre-harvest desiccation has the potential to promote more uniform dry down, improve harvestability, and reduce green material entering the combine; however, improper timing can negatively affect yield, seed size, oil content, and overall quality. Research is therefore essential to define optimal application timing, evaluate product performance across environments, quantify impacts on yield and harvest efficiency, and assess economic return, ensuring growers can confidently integrate desiccation into straight-cut systems while minimizing agronomic and financial risk.*

## Objective:

The objective of this field scale trial is to evaluate the agronomic and economic impact of pre-harvest desiccation timing on dry down, dockage, yield, seed quality, and harvest efficiency in straight-cut canola.

## Project Overview:

Cooperators will implement a replicated field-scale trial comparing pre-harvest desiccation products versus untreated check strips, using their own equipment and otherwise normal practices. An agronomist/trial manager will provide support throughout the season, including setting up the trial and collecting data. Statistical analysis of the data will be conducted following harvest, and a report with results including economic analysis will be provided. Data from all on-farm trials will also be pooled to examine the results across different management, soil, and weather conditions. Results from all trials will be publicly available, however individual farm data will be kept anonymous, apart from the location of the trial (nearest town or R.M.). Collaborators will be invited to join a network of producers who are conducting on-farm research through field tours and a year-end wrap up meeting. This program is available to members in good standing.

## Study Design:

- 1) Untreated Check
- 2) Pre-Harvest Desiccant Product
- 3) Pre-Harvest Desiccant Product 2 (optional)

Rep	1		2		3		4	
Plot	1	2	3	4	5	6	7	8
Trt	1	2	2	1	1	2	2	1
	Untreated Check	Pre-Harvest Desiccant	Pre-Harvest Desiccant	Untreated Check	Untreated Check	Pre-Harvest Desiccant	Pre-Harvest Desiccant	Untreated Check



Applications will be conducted at recommended timings based on products. Treatments will be replicated four times, for a total of 8 plots and randomized within the field. Apart from desiccation application, all strips must be managed the same agronomically including seeding, fertility, and pesticide (excluding desiccation) application. Variable rate (VR) seeding and fertilizer applications can be used. An example randomized field plan is shown above. Layouts will be provided.

## Data Collection:

Agronomists or trial managers will help the cooperator seed the trial according to the protocol and will complete the following in-season data collection.

- Spring or fall soil nutrient sample
- Soil samples to measure verticillium inoculum in the soil a composite for the whole trial area. Across the whole trial area, collect five soil cores (0-6") from each point in a "W" pattern. Mix all cores in a bucket and place ~400 g of mixture in plastic bag labelled with trial # and date
  - Spring 2026
  - Fall 2026
- Fall Stem Sample Testing: one week after harvest or after swathing
  - Cut 25 stems down to approximately 9", over the entire trial area
- Blackleg Race ID and Verticillium Testing Submission:
  - How to: cut 12 stems close to ground, using stems from each plot, cut 12 inches long, air dry for 24hrs, place in labeled paper bag
  - email [info@saskoilseeds.com](mailto:info@saskoilseeds.com)
  - provide the following information:
    - Sample Name, Agronomist name, Grower Name, Farm Name, Mailing Address, Town, RM, Land Location, Email
- Dry Down Ratings – after pre harvest desiccant application at 7 and 14 days after application
  - Whole plant visual dry down
    - 10 plants/plot on a 0-10 scale (0=fully green/wet, 10=fully dry/harvest ready)
  - Stem green %/stem dry rating
    - 10 plants/plot on a 0-5 scale (0=fully green, 5=fully brown/dry)
  - Pod Color/maturity rating
    - 10 plants/plot on a 0-5 scale (0=mostly green pods, 5=mostly brown pods)
- Yield – weighed separately for each treatment strip using weigh wagon or grain cart scale, it is recommended to keep all combine settings, including speed consistent across plots
- Combine Losses - use a drop pan or similar collection method, with 3 subsamples collected/plot
- Harvest grain samples for each plot (WARC to conduct grain analysis including dockage)
- Regularly scouting for treatment differences in weed pressure, flowering, maturity, disease pressure, plant health, or plant structure
- Economical breakdown
- Management data
- Weather data from May 1 to October 1

For more information or to participate in the program contact:

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